

ARTIFICIAL INTELLIGENCE JOURNALISM AND THE PROBLEMS IT MAY BRING

Yapay Zeka Gazeteciliği ve Yaratacağı Sorunlar



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Öz

İletişim, insan tabiatının en ayırıcı bir özelliğidir. İnsanlık tarihinin ilk dönemlerinde çok kısıtlı ve sınırlı olan insan iletişim yöntemleri, matbaanın icadından sonra, gelişmeye başlamıştır. Hatta haberleşme alanında adeta çığır açılmıştır. İletişimin daha da yaygınlaşmasıyla; dünyanın çeşitli ülkelerinde olduğu gibi; o zamana kadar ülkemizde de daha çok alaylı (usta-çırak) yoluyla yürütülen medya profesyonelliğinde, eğitilmiş gazeteci yetiştirmek için, bir eğitim seferberliğine doğru gidilmiştir. Türkiye’de 1948 yılından itibaren çeşitli isimlerle açılan gazetecilik okullarında yetişen eğitimliler sayesinde, günümüze dek medya gelişerek, iletişim alanında büyük bir yol almıştır. Ancak son yıllarda teknolojinin gelişmesiyle; yaşamımızın birçok alanına giren ‘Yapay Zekâ Robotları’, medya sektörüne de girmeye başlamıştır. Özellikle Microsoft’un girişimleriyle ortaya çıkan ‘Yapay Zekâ Gazetecileri’, son dönemde dünyanın birçok yerinde, medya çalışanlarını tedirgin etmeye başlamıştır. Uzmanlar ve bilim insanları, halen çalışmakta olan geleneksel gazetecileri uyararak, ‘Yapay Zekâ Gazeteciler’ konusunda tedbir almalarını önermektedirler. Bununla da kalmayıp; günümüzde üniversitelerde medya eğitimi almakta olan geleceğin gazetecilerini de uyarıyorlar. ‘Yapay Zekâ Gazeteciler’le baş edebilmek için, mevcut temel ders programlarının yanında; Kod Yazma, Yapay Zekâ gibi, birtakım yazılım dersleri de almalarını, medyadaki gelecekleri açısından önemli olacağını vurguluyorlar. Bu makalemizde yapay zekânın medya dünyasında getirebileceği bu sorunları uzmanların da değerlendirmesi ile ele alıp inceleyerek çözümler önermeye çalışacağız.

Anahtar Kelimeler: İletişim, gazetecilik, eğitim, Yapay Zekâ, Kod Yazma

Abstract

Communication is the most distinctive feature of human nature. Human communication methods, which were very limited and limited in the first periods of human history, started to develop after the invention of the printing press. With the spread of communication; as in various countries of the world; In media professionalism in our country, education campaign was made to train educated journalists. Those who have been educated in journalism schools opened under various names in Turkey since 1948, the media has developed and has taken a great stride in the field of communication. However, with the development of technology in recent years; 'Artificial Intelligence Robots', which have entered many areas of our lives, have also started to enter the media sector. 'Artificial Intelligence Journalists', which emerged especially with the initiatives of Microsoft, have recently begun to disturb media workers in many parts of the world. Experts and scientists warn the traditional journalists who are still working and recommend that they take precautions on the issue of 'Artificial Intelligence Journalists'. Besides, they also warn future journalists who are currently studying media at universities. In order to cope with "Artificial Intelligence Journalists", besides the existing basic curriculum; They emphasize that taking some software courses such as Coding and Artificial Intelligence will be important for their future in the media. In this article, we will try to suggest solutions by examining these problems that artificial intelligence can bring to the media world, with the evaluation of experts.

Keywords: Communication, journalism, education, Artificial Intelligence, Coding

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Sorumlu Yazar/Corresponding Dr. Öğr. Üyesi Kubilay ÇELİK

Çatışma Beyanı/Conflict Statement: Makalenin yazar/yazarları bu çalışma ile ilgili taraf olabilecek herhangi bir kişi ya da finansal ilişkileri bulunmadığını dolayısıyla herhangi bir çıkar çatışmasının olmadığını beyan ederler.

Introduction

Communication is as old as human history. From the first ages, communication of people; It has entered our lives with signs, grunts, pictures and symbols drawn on the wall, carved on the rock, sound, whistle, drum, bird, pipe, smoke. Thanks to such means of communication, people became aware of each other and the past. (Thompson, 2008, p.38) Later; horse, car and mounted messengers have entered our lives. A news, a letter or a message; Trained birds used to flap their wings for hours or even days to get them from one place to another. Horse messengers and mail coaches took over the postal and transport duties. Carrying a few passengers in them, these cars also took sacks of letters and announcements with them to their destinations. We pride ourselves on today's communication network and technology. However, long before us, people transcended the distance with the letters they wrote on a tree bark, and the time with the writing they wrote on their tombstones. (Segal, 1995, pp.77-80)

In very old years; It was carried from one place to another by news, fairy tales or travelers. In addition to their trade, the traders also kept the people informed about the communication and cultural developments in their destinations. In various parts of Anatolia; Folk minstrels with instruments, who still continue the centuries-old tradition, also contributed to the development of communication with folk songs, exchanges and sayings. (Celik, 2020, p.16) In the 1950-60-70s; Especially those who grew up in small cities of Anatolia, like the majority of our country, will remember very well that they read poetry on the streets with a megaphone, shouted epics, manias and poems consisting of one page, both informing the public and selling them. Some of them would put the poster of a new movie in the theaters behind the horse-drawn carriages and promote the movie with megaphones in their hands.

After the invention of the printing press with metal letters by Johannes Gutenberg in 1450; A new era has been opened in communication. People with easily reproduced announcements, proclamations, books; have become more accessible to information and communication. (Celik, 2020, p.16) The new invention has spread all over the world, starting from Europe. This printing technique, which we later called letterpress printing, became the basis of modern printing machines and the printing industry that emerged with the industrial revolution and continued until the end of the 20th century. Unfortunately, arrived in Turkey too late. The first Turkish printing house was established by İbrahim Müteferrika in 1727. However, this was very difficult to accept. Thousands of calligraphers, who earned their living by writing books, opposed the establishment of the printing media "because it was against their interests". However, with the fatwa given by the Shaykh al-Islam, he stated that establishing a printing media was not an obstacle for the religion of Islam. The arrival of the printing media to the Ottoman Empire 277 years late has always been the subject of discussion. In his speech at the opening of the Ankara Faculty of Law in 1925, the late Atatürk held the ulema (religious lawyers) responsible. According to the late journalist and politician Çetin Altan; The main reason for the delay of the printing media is our "unprofessional society, our inability to make an industrial revolution". Well; In a society that does not care about the writing and reading aspects of the mother tongue, it is normal for the printing media to be delayed.

1. DEVELOPMENT OF COMMUNICATION TECHNOLOGY IN THE WORLD AND IN TURKEY

If we summarize the development of the History of Media in the World and the years and who invented the media communication tools, in chronological order, the following information comes to the fore: the Sumerians discovered it in 3200 BC. Paper, which is the basic material of the media, is M.S. Ts'ai Lun invented it in 105. The precursor to the first printing media was first developed in China in the 700s as block printing. Gutenberg in Europe pioneered multiprinting in modern printing in 1450. They laid the foundations of today's media technology by developing the telegraph by William Cooke in 1837, the Morse code by Samuel Morse in 1843, the telephone by Alexander G. Bell in 1847, the cinema by the Lumiere Brothers in 1895, the radio by Marconi in 1902, and the television by Logia Baird in 1924. (mridvano.com.). In Turkey, on the other hand, we can summarize the years when communication tools started as follows: Newspaper (1895-Yeni Asır Newspaper before the Republic, 1924 Cumhuriyet Newspaper after the Republic), Radio (1927 TRT –PTT), Television (1964 TRT). Internet (1993 METU) and Social Media (after 2000)

1.1. Phases of Communication Tools

The concept of 'media', nowadays; It is divided into two as 'Traditional Media' and 'New Media'. The first thing that comes to mind when 'Traditional Media' is mentioned; Newspaper, Radio and Television. Now we call them "New Media"; Internet, Social Media, Digital Media have been added. Today, all of the visual and audio tools that aim to inform people and enable the transfer of content are called 'Media'. However, there are some important differences between the communication tools called Traditional Media, which the past generations are used to, and the communication tools called Social Media (New Media) today. According to Dimmick; Traditional media tools such as television or newspapers mean that they have limited content and a strict timeline that requires the user to comply. On the contrary, social (new) media offers individuals much more choice and much more control over content. (Dimmick, 2004, p. 20) It is the socio-technical changes that emerged around the new techniques and had important enough consequences for the historians to speak of the 'Revolution' in the general functioning of society, which is precisely the case for the advances in the information transfer techniques of the 19th century. (Barbier and Lawenir, 2001, p.132) Communication with the Industrial Revolution and the development of Technology; It has continued and continues to evolve by train, ship, plane, telephone, newspaper, radio, television and then the Internet. To such communication tools, people; they were aware of each other, the past and overseas places. Prior to; by steamships; both trade, passenger and letter traffic were provided. On land; rails were laid from one end to the other. Trains known as 'Iron Horses' at that time; carried dozens of passengers and sacks of mail. However, parallel to these rails, tall poles were also erected. By means of wires attached to ceramic cups, the telegraph came into play. While in 1865 there was a rail system of approximately 35,000 miles in the United States, by the mid-1870s this number had grown to approximately 200,000 miles. In England; The line length, which was 19,000 miles in 1850, was tripled by 1900 to 57,000 miles. (Hobsbawm, 1998b, p.67-72) The first basic electronic communication tool developed after the telegraph was the telephone. Based on voice transmission, the telephone was able to overcome many of the limitations of the telegraph. "Also; Because the telegraph required a command of Morse code and literacy, it was not possible to spread it to the home. By the late 1880s the convenience and effectiveness of the telephone allowed it to be used in the homes of the wealthy." (Crowley and Heyer, 2010 p.184) With the development of technology, an acceleration in communication began. This time, planes took on the task of communication and transport.

After the mobile phones, a new technology called the internet has emerged today, and thus a very effective communication tool was born that makes it possible to instant image, correspondence and voice conversation. All these technological developments in communication and communication; some needs have become essential. To communicate; There is a need for educated and cultured people. Therefore, institutions providing education in the field of communication have begun to emerge. Our country has also kept up with this development. New Media; It has emerged in the world with the electronic connection called 'internet'. For such information and communication; Tablets, smartphones and similar devices are required, especially online computers. For New Media; place is not important or necessary. It is possible to communicate in an open area where internet access is available, even on a mountain top. to new media; A number of social media sites added in recent years have made this new media wider, independent and free. It enabled people to share information and communicate with each other in pairs or even multiples. In this way, tremendous time savings are achieved. With the development of the Internet, individuals have had the opportunity to directly communicate their wishes, desires, ideas and thoughts to each other instantly and without the need for help from others. In the pass, individuals verbally over the phone written and visual communication is possible with the development of new technologies internet. (Motion, 2005, pp. 503-509) Today; new communication media are called 'new media'. The concept of new media was introduced in the 1970s by researchers doing social, psychological, economic, political and cultural studies in information and communication-based research. However, the meaning mentioned in the 70s expanded and reached different dimensions with the computer and internet technology that gained great momentum in the 90s" (Dilmen, 2007, p.114)

1.2. Journalism Education in Turkey

Ahmet Emin Yalman, who wrote his doctoral dissertation titled "The Development of Modern Turkey



as Measured by Its Press” at Columbia University Faculty of Political Sciences in the USA, first came up with the idea of providing journalism/communication education in Turkey in 1914. However, in the Ottoman period, although Ahmet Rasim wanted to open a journalism school, no steps were taken regarding his education. (Güz, 2017, p.1548, Topuz 2003, p.9, Tokgöz, p.2006) With the Press Law of 1931; It is stipulated that those who will work in the positions of newspaper and magazine owners, editor-in-chief and editor-in-chief must be graduates of college or high school. Therefore; It was on the agenda to open a journalism school in Istanbul, but it could not be opened.

The spread of communication and its penetration into every aspect of our lives have also led to the emergence of some needs. E.g; For the preparation of newspapers, a professionalization has been made in Turkey as well as in various countries of the world. The 'Journalism' profession, which we called 'Regimental' and carried out with a 'master-apprentice' relationship by people who did not have a communication education, was established in the 'Private Journalism School', which was opened for the first time in Turkey in 1948, with the principle of '*training people who are prepared for the world of press and business life*'. (Altun, 1999, p.245) has returned to an educated state. This school, which is not at the level of higher education, trains staff for the press and business sector. It is the first private journalism school. (İnugur, 1988, p.155-157).

Media organizations played a role in the beginning of communication education. After the Turkish Press Association, which was founded in 1938, was closed in 1946, Journalists' Associations were established. Sedat Simavi, who was the President of the Istanbul Journalists Association in 1947, was appointed as the Rector of Istanbul University; The fact that he stated the necessity of doing journalism education at the university shows that the industry is leading the way for the start of journalism education (Özbek, 1993, p.307, Gürkan and İrvan, 2000, p.354). The first communication/journalism education at university level in Turkey started in 1950 at Istanbul University Faculty of Economics Journalism Institute. Founded in 1949, this institute accepts high school graduates in 1950 as well as those who have worked as a journalist for two years regardless of their education degree. The two-year school is in the following years; Upon the application of the student association, it was extended to four years and renamed Istanbul University Journalism Public Relations School. In 1965, with the recommendation of the Ankara Journalists Association and the support of UNESCO, Ankara University Faculty of Political Sciences Press and Broadcasting High School was opened. Ankara University, Ankara Journalists' Association, Ankara Journalists' Union and Anadolu Agency made an important effort to establish the school (Abadan-Unat, 1972, p.76, Altun, 1995, p.109; Yıldırım, 2006, p.125, Tokgöz, 2006, p.11-15). With the adoption of the Law on Private Education Institutions No. 625 in 1965, the first private schools in the field of journalism/communication started to be opened. In this context, one of the higher education institutions established in 1967 was the Başkent School of Journalism. The school was affiliated to the Ankara Academy of Economics and Commercial Sciences under the name of the School of Journalism and Public Relations. Its name was changed to Gazi University Press and Broadcasting High School with the Decree Law No. 41, which entered into force on July 20, 1982. Istanbul Journalism School, which was established within the framework of Law No. 625, showed a similar development. Founded in 1966, Istanbul Journalism. After the high school was nationalized, it was affiliated to the Istanbul Academy of Economics and Commercial Sciences, and in 1982 it became Marmara University Press and Broadcasting School and in 1992 Marmara University Faculty of Communication. Founded in 1968, İzmir Karataş Private Journalism School, like other private journalism schools, was nationalized in 1971 and affiliated to İzmir Academy of Economics and Commercial Sciences. While a total of five higher education institutions, two in Ankara and Istanbul and one in Izmir, graduated in the field of communication in 1970, Anadolu University has started to provide education in the field of communication since 1975. The name of the schools that provide education at the higher education level depending on the universities; It was named as the Faculty of Communication with the Law No. 3837, which was accepted in 1992. (Ergeç, 2014, p. 6) Since 1997, Communication Faculties have been established under the Foundation Universities. In this period, departments such as communication, public relations, radio and television broadcasting, photography were opened under the two-year vocational schools, together with the communication faculties that provided education for four years. (Uzun, 2007, p.122-123). In addition, departments and programs providing communication education have been opened in some departments of the Faculties of Fine Arts and in the faculties of

science and literature, economics and administrative sciences, and business administration of universities that do not have communication faculties. Higher education institutions that were initially opened only to provide education in the field of journalism; They opened the radio, television and later cinema departments as the second section, and the public relations and promotion departments as the third section. In recent years, the "New Media" section has started to be opened. Communication education did not remain only at the undergraduate level, but in parallel with the establishment of YÖK after 1980, it became an area where education was given at the graduate level (master's and doctorate).¹

1.3. Conditions of Communication Faculties in Turkey

Communication faculty; They are educational institutions that train communicators for both the media sector and the academic world by keeping up with the developing technology. 'Communication' is the mutual information flow of both the receiver and the sender in a healthy environment. Communication faculty; It should raise knowledgeable individuals in the fields of Newspaper, Television, Radio, Cinema, Public Relations, Advertising and Visual Arts. The first step taken to the media, creating suitable field space and job opportunities for individuals should also be among the duties of the Faculty of Communication. Raising an active, thinking, young and productive generation in our country or around the world is among the main objectives of the Faculty of Communication.

As of 2019 – 2020, the total number of State and Foundation Universities providing education in Turkey is 208. 73 of them have Faculty of Communication. Again, in the 2019-2020 academic year, the total number of students studying at the Faculty of Communication in Turkey is 79,475. In the last 3 years (2017-18-19), 7-8 thousand students graduate from Communication Faculties every year. (<https://istatistik.yok.gov.tr>). According to some authorities; The number of schools, the number of students, the number of graduates given each year has reached a very high figure. These graduates will either continue their academic careers or start their careers in any branch of the media industry. However, if we consider the employment capacities of both the Communication Faculties and the media sector, some problems arise. Graduates of the Faculty of Communication; He may not be able to find a job easily in academia and media. The employment capacity of both local and national media in Turkey is clear. It is seen at the beginning that the number of Communication Faculties and the number of graduates they give each year is above the employment capacity.

Since not all of the thousands of students studying communication today can be academics; The primary duties of Communication Faculties should be to train personnel for the sector. In communication education in Turkey, the balance between practice and theory, the extent to which the demands of the media will be taken into account in determining the course curricula of communication faculties, and whether the main purpose of the Communication Faculties is to train personnel for the sector is an ongoing debate. (Ünlü, 1999, p.92)

Today (2021), the total employment capacity of Turkish Media is around 20-22 thousand. However, in the media in recent years; As a result of acquisitions, acquisitions, mergers and the economic crisis, this number has halved. In other words, at least 10 thousand professional journalists are unemployed today. If we add to this, around 7-8 thousand young journalist candidates who graduate from Communication Faculties every year, it becomes more evident how difficult it is to find a job in the Turkish media. (yok.gov.tr) Considering the Communication Faculties in Turkey; should be examined in terms of both the curriculum and its relevance to the media sector. It is important that the bond between Communication Faculties and the Media Sector should be strengthened. For this, it is important to reveal what kind of path will be followed and to take the necessary measures for employment. The infrastructure required to train qualified students in the Communication Faculties of some state and many foundation universities is either very insufficient or does not exist at all. Therefore, students in Communication Faculties cannot gain experience in the sector. This research; It is based on the idea that the student quota in Communication Faculties is far above the employment capacity of the media sector. YÖK (Higher Education Board), which is the authorized institution in

¹ <https://www.mevzuat.gov.tr>

this regard, should review the admission of new students every semester by some inadequate Communication Faculty.

2. FROM PAST TO PRESENT: THE TRADITIONAL AND NEW MEDIA APPROACHES

There are important differences between the communication tools (newspaper, radio and television) that the past generations are used to and called the Traditional Media, and the communication tools that are now called Social Media (New Media) with the invention of the internet. According to Dimmick; Traditional media tools such as television or newspapers mean that they have limited content and a strict timeline that requires the user to comply. Social (new) Media, on the contrary, offers individuals much more choice and much more control over content. (Dimmick, 2004, p.20) With the development of the Internet, individuals have had the opportunity to directly communicate their wishes, desires, ideas and thoughts to each other instantly and without the need for the help of others. Oral, written and visual communication is possible with the development of new technologies (internet). (Motion, 2005, pp.503-509) New Media, after the emergence of the Internet; A form of communication has emerged that makes our lives easier and saves a lot of time. We also call this "Social Media.;" In general, it is a digital field. The biggest feature of Digital Media is instant and fast communication and sharing. However, the same news; most quickly, we hear or read it (perhaps as a subtitle) 10-15 minutes after television and radio. Traditional media transmit the news in written (newspaper), oral (radio) or audio-visual (television) form. Social media, on the other hand, creates a hypertext or meta-language by integrating the news within the system. Social media has the opportunity to combine different mass media tools (such as text, sound, image, video) on a single platform and transmit them in the form of "multimedia". Despite the passive participation of the individual or the mass in the face of the news transmitted through the traditional media channel, it allows the individual or the masses to become active in the face of the news transmitted with the contributions of the social media. (Binark, 2007, p.34-36) Difference in Interaction The interaction of the masses from the message can take place in many ways. Traditional media transmits the message in general one-way and the feedback of this message is either absent or occurs later and quite limited, whereas in social media, the message is two-way. In other words, the sender who receives the message can instantly contribute to its content and provide feedback. As an interactive tool, social media (Internet) offers the opportunity to remove the walls that divide the audience, causing active participation beyond a passive existence. (Cavanagh, 2007, p.65-71) On the other hand, we read it in newspapers only a day later. Here, one of the biggest disadvantages of newspapers is the possibility that the news or information may change after the printing time. However, any development in the news on Social Media can come to us instantly. Everyone has a say in Social Media. Today, newspapers, magazines, radio and television are the communication tools of the public sphere. (Habermas, 2004, p.95-102) In different countries of the world; It is seen that many newspapers have stopped printing papers and started publishing only on the Internet in order to avoid costs.

We can say that Turkey has started to keep up with this trend. In recent years; Vatan, Habertürk, Star and Güneş newspapers put an end to paper printing and started broadcasting on the internet. Printed newspapers; He prints his news on paper and delivers it to his readers a day later. In internet journalism; news can reach the reader instantly. However; There are great difficulties in the accuracy of every information in some internet newspapers.

3. ARTIFICIAL INTELLIGENCE ERA

While the experienced journalists of the years and the newly graduated journalist candidates from the Communication Faculties are struggling to cope with the painful reality of 'unemployment' today, 'Artificial Intelligence Journalists' have been added to this. Some think that millions of people will be unemployed in 10-20 years.

Artificial Intelligence, that is, robots, mainly into our lives; entered to assist in automobile construction or heavy industry. Since physical workers in this type of industry are called 'Blue Collar', it was thought that robots would take over exactly these blue-collar jobs. To those who work in the industry not as a body, but as a brain, that is, to the executive team; They are called 'White Collars'. The algorithms, data and codes created by these white-collar workers have been



uploaded to the 'Blue Collar Robots' and today, they have been made maximum use of them. This provided both time and economic benefits to industrial and technology production. Artificial Intelligence Robots, which have been used in the fields mentioned above for years, have been used in the media sector in many parts of the world in recent years. Although journalists tend to perceive themselves as a different professional group from society because they are specialized (Jung, 2017, p.292), Journalism, like many business lines that require skill and expertise, has entered the process of automation, especially with the increase of sophisticated algorithms. Others are of the opinion that automation will create new jobs and bring prosperity to all. It's really hard to predict which will happen. But for the thesis that millions of people will lose their jobs, it may be useful to look at history. Another research carried out is; He predicts that 90 percent of the news texts in the media will be written by artificial intelligence in the next 10-15 years. Today, it is seen that a similar application can be adapted to the tasting texts of social media by summarizing long news articles.

If we look at the developments following the Industrial Revolution in the 19th century, it is seen that a new job was created instead of every lost job and the standard of living increased.

Making a statement to Anadolu Agency (AA) on this subject, Istanbul Medipol University Faculty of Communication Faculty Member Assoc. Prof. Dr. Berrin Kalsın, for the use of artificial intelligence in the field of Journalism; "The most discussed point was that journalists will lose their jobs, that is, the employment problem. However, even though algorithms take over basic reporting practices, it is a fact that news always needs a human touch." she said. Artificial Intelligence Journalists to Human Journalists; While they have "fear of losing their jobs", some experts say that it is not that much of a fear, and even that it can help. Assoc. Prof. Dr. Berrin Kalsın summarizes this situation as follows: "Actually, many journalists are unaware of what benefits artificial intelligence will bring to their working conditions. Artificial Intelligence basically performs tasks such as problem solving and understanding language. At this point, it features features such as getting rid of monotony in news production and narrating basic information. Therefore, algorithms allow journalists to spend more time on special news by doing the basic work. For example, audio-to-text translation tools eliminate hours of deciphering. Apart from this, the warning system can easily catch wrong points in the news or issues that have not been covered before are still available. It can be discovered thanks to this technology. However, disinformation or fake news that we talk about a lot these days can be detected."²

In the news of Erdem Cürgen published on this subject³, Artificial Intelligence Journalists and their use by many media organizations around the world. In this respect; London School of Economics (LSE) conducted a survey in 71 news organizations, including TRT, in 23 countries, including Turkey. According to the results; the most popular applications in the use of artificial intelligence in journalism; It is seen in the US, UK, China, Germany, Finland and Ukraine media. However, it seems that most news organizations do not have an artificial intelligence strategy. The report titled The Journalism AI (Journalism Artificial Intelligence) has been published on the LSE website. In the survey conducted for the report, journalists from different positions were asked how they view artificial intelligence and how they see the risks and opportunities it brings to the journalism industry. The summary of the report states: "Artificial intelligence gives journalists more power, but it also increases editorial and ethical responsibilities. The future impact of artificial intelligence is uncertain. Yet it has the potential to have a far-reaching and in-depth insight into how journalism is made and consumed. Artificial intelligence can help journalists do their jobs better at a time when the journalism industry is struggling for economic sustainability and public trust. It can also help the public deal with information overload and disinformation in a news-filled world by making it easier for users to come in contact with reliable information that will be of interest, useful, and uplifting to their lives." The report includes artificial intelligence practices in the fields of news gathering, news production and distribution. While 68 percent of the media workers who responded to the survey said that this would enable journalists to work more efficiently, 45 percent said that content that users would be more interested in could now be prepared, and 20 percent said that work efficiency would increase.

² <https://www.hurriyet.com.tr/teknoloji/yapay-zeka-teknolojisi-gazeteciligi-etkilenen-mi-41538977>

³ <https://journos.com.tr/gazetecilik-yapay-zeka>

The use of computers and software to collect, distribute and publish news content is increasing day by day. Algorithms can now write news without human intervention with a set of stereotypes and statistical information. Each stage of news production becomes automatic, and thousands of news can be created in seconds at a low cost (van Dalen, 2012, pp. 648-649). Artificial Intelligence Journalists or Robot Journalism make us question some talents in human journalism made of flesh and bone. Both professional journalists working in the media industry are required to learn new technology by attending a series of in-house courses and workshops. In addition, the courses that prepare the students of Communication Faculties for the new newsroom dynamics in order to find jobs in the future and protect their jobs should be taught.

If communication faculties fail to strike that balance, graduates will increasingly lose the battle to robots capable of routinely collecting data and reporting, and citizen journalists, who collect information from real-life situations around them. (Van Der Haak, 2012). So as robot journalism evolves, working and working journalists will have to specialize in making more commentary and analysis. This makes communication graduates, in addition to their journalistic skills, also will enable them to become both successful news writers and social science practitioners. This puts a lot of pressure on schools for the necessary education, and especially for teaching courses to manage robotic reporting technology. However, in today's education, most of the students; Aside from uploading the data to the server, it makes mistakes even in three lines of petition writing. Journalists and journalism students need to use Artificial Intelligence effectively instead of surrendering to Journalists, that is, technology. Because although robots usually win in robot-human comparisons in many areas today, people who know how to work together with robots against robots are always ahead.

It is certain that today and the future will be the Age of Artificial Intelligence. Therefore, people, especially journalists and journalist candidates who will work in the media, should not be afraid of this technology, learn to live with it and know how to use this technology. Therefore, journalists who know this technology can save time for more challenging tasks such as tracking events and investigative reporting by loading routine news and tasks to robots. Media bosses and managers are also very satisfied with Artificial Intelligence Journalism and this technology. Because this method paves the way for more efficiency and cost-cutting measures. In other words, robot journalism is both cheaper and saves more time in producing content faster. In addition, Artificial Intelligence Journalists do not have both insurance premiums, salaries, vacations, annual and paid leaves. This reduces labor costs. All bosses prefer to produce with this technology, which is less costly and less risky.

America's world-famous news agency Associated Press (AP), one of the first organizations to invest in artificial intelligence, increased the number of institutions where financial news is published every day from 300 to 4,000 thanks to the application it uses. Also; Artificial Intelligence provides faster access to data to the British News Agency Reuters, while simultaneously updating the data in live broadcast news texts. This type of journalism includes “automated content”, “), web 3.0 journalism, robo-journalism, automated news software, software-generated content and algorithmic news” (Graefe, 2016, Bunz, 2010, Levy, 2012) automatically generated content (Clerwall, 2014, p.519) is also known by other names. In its simplest form, the concept can be defined as the algorithmic process that transforms data into news text without human intervention, except for the initial programming stage (Carlson, 2014, p. 416). In other words, robot journalism is the creation of similar automatic news texts from current data as a result of algorithms storing and interpreting news clichés on certain topics.

What is Artificial Intelligence (AI)?

In the simplest terms, Artificial Intelligence (AI) refers to systems or machines that mimic human intelligence and can iteratively improve themselves based on the information they collect, to perform tasks. Although artificial intelligence provides images of high-level human-like robots taking over the world, the purpose of artificial intelligence is not to replace humans. The aim is to significantly develop and contribute to human capabilities. (Yapay zeka (AI) nedir?” <https://www.oracle.com/tr/artificial-intelligence/what-is-ai/>) Today we have to divide intelligence into two. One is machine intelligence and the other is living intelligence. Well; It is the intelligence displayed by Artificial Intelligence “machines”. Natural intelligence includes the consciousness and emotionality exhibited by human intelligence and animal cognition. The leading field of artificial

intelligence textbooks is defined as the study of "intelligent agents." (https://tr.wikipedia.org/wiki/Yapay_zek%C3%A2).

3.1. The History of Artificial Intelligence

The term Artificial Intelligence (AI) was coined in 1956. But artificial intelligence has become more popular today, to increased data volumes, advanced algorithms, and improvements in computing power and storage. Subordinated to the US Department of Defense in the 1960s during the Cold War; The Defense Advanced Research Projects Agency (DARPA) is an agency established to produce new technologies for the US military. (https://www.sas.com/tr_tr/insights/analytics/yapay-zeka-nedir.html)

3.2. Introduction of Artificial Intelligence to the Media Sector

As a result of technological developments; Artificial Intelligence Robots, which enter many areas of our lives, have also started to enter the media sector in recent years. Artificial intelligence journalism; It is already used today in financial, sports and weather news. Artificial intelligence journalists can write the news that used to be routinely prepared by journalists in a much shorter time. Artificial Intelligence Journalism; Today it is used by organizations such as the Associated Press, The Washington Post, and Bloomberg. (<https://vizyonergenc.com/icerik/yapay-zeka-ve-degisengazetecilik-pratikleri>) Almost a third of Bloomberg news is produced by Machines. The largest use of Artificial Intelligence Journalism is; It was the news of The Washington Post's 2016 United States Presidential Election. However, experts; Artificial Intelligence Journalism says there is no threat to journalists. Because the main purpose of Artificial Intelligence Journalism is to enable journalists to deal with better quality and deeper news. "Should journalism students learn software?" The question has been discussed for a long time in the world. However, many universities have already implemented software courses in their journalism departments. Columbia University in the USA was a pioneer in this regard. He teaches software and data journalism to young people. There are similar practices in some universities in Turkey, albeit a little. The situation shows that; In the future, besides the basic courses, software courses will be added to the program of the Department of Journalism. (Narin 2017) Many countries of the world are now; In the media, Artificial Intelligence has begun to assign journalists, rather than manpower. The latest examples of this are; It was seen in the UK and US elections. In the 2019 elections in the United Kingdom; While the BBC's election results were one of the prominent trials, the BBC announced that nearly 700 news items published on the election night that resulted in Boris Johnson's victory were written by artificial intelligence. However, the news was checked by an editor before it was published. In 700 news written by artificial intelligence, information such as who is ahead in which region and how many of the ballot boxes were opened, the voting rates in the past periods were also compared. (<https://www.aa.com.tr/tr/sirkethaberleri/egitim/yapay-zeka-arastirmaci-gazeteciligi-etkilemeyecek/657753>) 'Artificial Intelligence Journalists', which emerged especially with the initiatives of Microsoft, started to disturb the media sector as well. It laid off some 50 journalists and editors at Microsoft News and MSN organizations in May 2020, replacing them with AI journalists. (<https://www.bbc.com/news/world-us-canada-52860247>) their work in the media; With the concern of handing them over to robots, the bloody journalists working in the media embarked on a search for how to fight against these iron piles of journalists. Experts and scientists warn today's traditional journalists and recommend that they take precautions on 'Artificial Intelligence Journalists'.

4. SHOULD JOURNALISTS LEARN TO CODE?

It is difficult for now to give a definite answer to the above question. Because the discussions are still going on. However, the number of people who say that they need to learn some programming languages for the purposes of journalists is increasing day by day. For example, according to (McAdams 2013) from the University of Florida, a journalist needs to have a basic knowledge of HTML as well as knowing how to insert commas at appropriate places in the text. Many experts; to future journalists who are studying media at universities; In order to cope with "Artificial Intelligence Journalists", they recommend taking some software courses such as Coding, Artificial Intelligence, in addition to your current course curriculum. They emphasize that it will be



important for their future in the media to be able to write them. Where did these 'Artificial Intelligence Journalists' come from? When the genre we call 'New Media' was added to 'Traditional Journalism', it was inevitable that this business would reach here. New Media; emerged in the world with the electronic connection called the 'internet'. For such information and communication; Tablets, smartphones and similar devices are required, especially online computers. World - Turkey; While they were thinking about how to deal with the monster called 'Internet' and especially 'Social Media' that they created and used, 'Robot Journalists' started to be added to this. Because, in many countries, including Turkey, even when 'internet laws' have not been made yet, the issue of who will be responsible for the ethical and legal responsibility of the news written by robot journalists has not yet been brought to the agenda.

4.1. Did a human or a robot write this article?

As a result of the introduction of Artificial Intelligence into the world of media and literature, we can now ask each other the following question; “Did a human or a robot write this article?” We can open this question further with an example: In the past, there was a 'handmade carpet'. All countries famous for their carpets would contribute to their economy by selling handmade carpets made by dozens of women sitting on simple benches and lasting for weeks. Turkey was one of these countries. However, with the development of technology; like many things, almost all carpets are now produced by machines. Making a handmade carpet, which took weeks with the contribution of many people, can now be woven in a few hours thanks to machines. That's why when people buy carpets; They can choose 'handmade' or 'machine-made'. Based on this example, we can easily say that, in the near future; We can meet many artificial intelligence robots who write articles or books and ask each other the following question; “Did a human or a robot (Machine) write this?” Swedish Academic Christer Clerwall; In 2014, we found out that he conducted a study on this subject with 45 journalism students. In the study, students were given news texts and asked to identify "whether it was written by a human or an artificial intelligence." The interesting part came after that. Because none of the students could understand the difference. However, when the truth is revealed; this time, the students found the news written by artificial intelligence “more boring”.

4.2. An Artificial Intelligence Program Wrote a Novel in Japan

We; “Did a robot or human write this article?” While discussing the. your computer; We learned that by passing the first elimination, he is in a position to receive an award. An article on the subject stated:

“An artificial intelligence program in Japan managed to write a short novel called “The Day A Computer Writes A Novel” (The day a computer writes a novel) in March 2016, and this novel, which passed the first round of the competition, almost won the “Hoshi Shinichi Literary Award”. “He was winning. (https://bigthink.com/natalie-shoemaker/a-japanese-ai-wrote-a-novel-almost-wins-literary-award.)

5. ARTIFICIAL INTELLIGENCE IN THE PERSPECTIVE OF SPECIALISTS FROM DIFFERENT DISCIPLINARY BACKGROUND

Judging by what the experts say; Artificial Intelligence Journalism will not destroy Human Journalism. However, there will be differences and developments. The basis of journalism; 'wondering', 'investigating' and 'inquiring' will always exist. Let's not forget that; Artificial Intelligence Journalism will make its presence felt more in the media in the coming periods. With such an incredible development of the Industrial and Technology Revolution, it is inevitable that artificial intelligence, which exists in every sector, will also enter the media. It was inevitable that the typewriters that we used to write in the past were replaced by computers today. Making Artificial Intelligence is a separate field of education and expertise. However, students who receive media education; While they are still in school, it is very necessary today to "take some lessons on how to use artificial intelligence" in addition to their basic lessons. Artificial Intelligence is not a product in itself, it is a technology. Journalists and journalist candidates need to know how to use artificial intelligence in the media, just as doctors use in medicine and engineers in industry.

Experts in Artificial Intelligence, whose opinions we get on this subject; Nişantaşı University, Electrical and Electronics Engineering Department, Prof. Dr. İlhami Çolak said: ⁴“Computer is now used in every profession and almost everyone can use it because all kinds of data have entered this artificial intelligence. So you; you are the user of the computer, not the maker. Of course, there are people who make computers, but this requires a separate training. E.g; There are robots used in the detection and treatment of the disease. If you're not the one making these robots, at least be using it to make your job easier. Today, the area where artificial intelligence is not used is something that does not exist anymore. Let's say; 2,000 news comes from a news agency to a newspaper a day. It takes hours to read this one by one by human power. However, it may take a few minutes to upload and scan these news to the artificial intelligence robot. Robot; it scans and presents the news in accordance with the style, news structure and news logic of the newspaper. Here are the new generation of journalists; In addition to journalism, if they take additional courses (coding and artificial intelligence) that will be able to use this robot, upload data to them, and have knowledge and equipment, they can do their job faster, more successfully and more accurately. It is more logical to be the person who knows how to use that robot, instead of seeing the artificial intelligence robot as a competitor and fighting in the future, which is likely to enter the sector.” We also asked the following questions to Prof. Dr. İlhami Çolak, the answers we received are below.

Would there be from Artificial Intelligence boss, CEO, or media Editor-in-Chief?

Artificial intelligence; It exists at every stage of our life. As it is known, Artificial Intelligence is a software program. The more quality and hardware you upload to this program, the more successful the robot will be. This work does not end with the software alone, the appropriate data for that software must also be provided. The more data that is close to the truth is loaded, the easier it is for people's lives. Based on this, we can say that if you have the necessary hardware installed, you can become a very successful boss or newspaper manager from Artificial Intelligence.

Can I negotiate a salary or raise with the Artificial Intelligence Editor-in-Chief?

Robots; They are not 'emotional' like humans. If you have uploaded the correct and well-equipped data to this robot about the work that the senior manager or Editor-in-Chief should do, it can also do what is necessary. To the robot; If you have uploaded accurate and solid data on how the workplace works and its economic situation, it will do what is necessary. As a result of the questions that the robot boss will ask you and the answers you will give, the salary or raise that he can give you can be determined by evaluating it within its own evaluation criteria. At the point we have reached technologically today, we do not have a deficiency in this regard. In other words, apart from the 'emotional' aspect of the human, it can do everything with the data you upload to the robot.

Can an Artificial Intelligence Journalist write the 'emotional' article written by the Human Journalist?

A little more work is needed on the data and software that robots can write such texts on. Can he write, 'yes', but 'can he add sentimentality to the writing? Studies on this subject are not enough yet.

One day; Will the Human Journalist disappear completely, can robots take over the media?

No, it will not disappear, with the developing technology, human and robot journalists can work together. After all, it is human journalists who will also manage the robot journalist. Because in the end, it is the human being who will upload that information to the robot about what to do. Based on Van Dijk's analysis below, we finally asked İlhami Çolak the following question:

When we talk about racism and critical discourse, Teun van Dijk immediately comes to mind. His critical discourse analysis analyzes news as a text and discourse tour within a specific language and text structure or socio-cultural practice. This analysis framework covers the textual structure of the news, the comprehension/interpretation of the news by the readers and the news production processes of the journalists (van Dijk, 1988).

⁴ On August 12, 2021, This interview was held at Prof. Dr. İlhami Çolak's office.

If a genius scientist uploads data and hardware to a journalist robot about racism, hatred, and evil, can the robot put those requests into writing?

As I mentioned before; The robot is a machine, whatever you program the machine, it does what it needs. So after programming; It cuts both iron and fabric... Starting from this, we can say the following; if you robot journalist; If you install hateful and malicious software and programs, they will write about it in their articles. Just like in movies; No matter how the robot you programmed to kill a person does what is necessary, the journalist can write bad articles on the robot according to the loaded program. We can also talk about some functional problems related to artificial intelligence. Let's try to deal with these again with the help of interviews with experts on the subject.

5.1. Artificial Intelligence journalist can convey emotion in his writings?

In line with the data available and uploaded in every field of Industry and Technology, it continues to be a matter of curiosity what robots can do in the media sector, which can handle almost everything. Artificial Intelligence journalists, who sort hundreds of news stories in a very short time and bring them into the shape desired by the media organization they work for, can write news in a very short time compared to human journalists. However; It is still debated whether Artificial Intelligence Journalists can add 'emotion' to their news. In the loaded data; It is wondered how Artificial Intelligence Journalists will reflect some of the features that exist in human beings such as happiness, crying and pity in their writings. We can also see whether this can happen or not; we asked this question to, Üsküdar University, Faculty of Humanities and Social Sciences, Department of Psychology Prof. Dr. Sırrı Akbaba:⁵

Answer: Artificial Intelligence (Robot) Journalists have behavior, but no sensitivity. creativity of thought; There is as much as the data that expert scientists on this subject upload to the robot (machine). So to the robot; The more data about emotion and thought is loaded, the more sensitive the robot will be in this regard, but it cannot offer anything from its origin. The more and more ingenious the data uploaded to the robots, the more successful the robot will be. In fact, many people are far superior to their intelligence. This is limited to data uploaded to a robot. So the robot can only do so much. In the human brain, there is a feature of 'creativity'. Because these are us; They are properties given by the 'creator'. The most controversial issue between robot and human is 'thought'. 'Don't cry' to the robot vs. If you load data like this, it can do it, but the 'feel' is clear and the robot doesn't have this feature. In other words, it writes the events of 'crying' or describing something that you upload to the robot, and even writes it in depth. Because what we call 'writing' is a 'behavior'. If you load the data right into the robot, it can surpass the human in 'behaviour'.

Question: Robot journalists; Can he give factors such as hatred, hatred, revenge, racism, ethics, morality and conscience in his writings?

Answer: If their data is loaded, it can show as appearance on the robot, but here the interpretation is different. Robots behave in the comments we add as human beings, without tasting what a human adds. Even robots according to the uploaded data; He can also include the coefficients of behaviors that do not occur to one's mind in his writings. Since the source of robots' behavior is human, human journalism does not die, no matter how much Artificial Intelligence Journalist develops. That is, if there is no 'thought', there is no 'human'. The essence of man is thought.

5.2. to Artificial Intelligence; If we upload data with religious content, will Artificial Intelligence have a Religion?

Artificial Intelligence topic; In recent years, it has started to be spoken frequently in Turkey as well as all over the world. While each sector is examining Artificial Intelligence from its own point of view, we have started to examine it from various aspects in terms of Communicators and the media. The conclusion was this: Whatever hardware and data you upload to Artificial Intelligence, it will act as a machine according to the given command. Then we thought; The religious elements in the title of this chapter began to come in. "I wonder if Artificial Intelligence has a religion?", "If Muslim, Christian or Hindu scientists upload data about their own religion to AI, will they be members of that religion?" "I

⁵ On August 13, 2021, This interview was held at Professor. Dr. Sırrı Akbaba's office.

wonder what would happen if data on factors such as grudge, hatred and racism were uploaded and directed to denigrate another religion?"

Here are the answers to such questions; Islamic Philosophy Specialist, Honorary Member of the Turkish Academy of Sciences, Ibn Haldun University Alliance of Civilizations Institute Prof. Dr. Alparslan Açıkgenç:⁶ We asked Mr. Açıkgenç said the following.

To Artificial Intelligence; If data such as emotion, grudge, hatred and racism are loaded, we can expect such behavior from the machine. As it is known, artificial intelligence is a kind of robot, it exhibits the behavior required by whatever is loaded. Of course, in this case, engineers know better, programming is one thing, getting things programmed is another. In other words, what we upload as artificial intelligence, whether it is a machine or a robot, must be of a nature that can do whatever it is. For now, let's talk by assuming that an "entity" on which artificial intelligence is installed as a program is capable of fulfilling programs in artificial intelligence. Here, with the word "entity", I mean whatever the artificial intelligence is loaded with. Because I don't know what this thing is, but I think the word "robot" describes this entity better because we think it does certain things. In this case, if a program containing hatred and violence is placed on this "entity", it does not make him a "terrorist", it makes the person who installs artificial intelligence on him a terrorist. The reason for this is that the person who commits a behavior in law is required to be a conscious being in order to be responsible. In addition, the word 'mentally confident' used in our country also expresses this in suspense. One can say that since there is intelligence in this robot, it is considered "mentally confident" even if it is artificial, and he is responsible for it. There is only one aspect of this, this robot is not actually a terrorist, but it is "dangerous." Because the uploaded program will lead it to constantly generate violence and hatred, it is dangerous and should be destroyed. Its destruction consists only in changing its program. Otherwise, if it is said, "Let's execute like a human being", it will not be executed anyway. So this robot, loaded with violence and hatred, is not responsible, but dangerous.

The same is true for uploading religious data to Artificial Intelligence. Attributing all the features and duties of a religion to him does not make him a member of that religion. Because Artificial Intelligence has no consciousness, will and belief. Let's say a robot loaded with artificial intelligence has acquired the beliefs and obligations of Islam. He can pray, fast; In fact, we cannot say 'Prayers and fasts', but we can say that 'Prayers are being led and fasting'. In this case, according to the Islamic belief, you cannot force anyone to "make religious orders". In other words, if you force a person to testify and pray and fast, that does not make him a Muslim. Well, in this case, how can an artificial intelligence become a Muslim if even a human cannot become a Muslim? In that case, artificial intelligence is not responsible for what it does because it is not conscious and does not even know why it is doing what it does. Religion, on the other hand, is responsibility and requires consciousness and will.

In this case, there is another possibility: “Is it possible to bring consciousness and will to artificial intelligence in the future? So, in a way, can they be produced in a way that robots will have feelings and consciousness in the future?”

This question is a little difficult to answer, but we cannot predict what will happen if emotions can be transformed into artificial intelligence, but we can make some speculations. Let's say this is possible, does that make AI religious? I think it won't do it again, because in this case, artificial intelligence still has no will. It can be said that will is the most important quality of life for religion. As a result, I say that artificial intelligence has no religion.

Conclusion

All these examinations and researches show that; In addition to the basic courses, the addition of some software courses (coding and artificial intelligence) to the curriculum of the Communication Faculties will be for the benefit of the students. Considering that every industry and business line is integrated

⁶ This interview was held at Professor Alparslan Açıkgenç's office on August 16, 2021.

with artificial intelligence today and in the future, this is inevitable. Such software courses; In a simple way, starting from primary school, increasing the difficulty levels and including it in university education will be of great benefit. Artificial Intelligence (robot) today; It is frequently used in areas such as health, food, production, automotive and textile. Robots doing a job alone and in minutes, which would have been done by tens of workers for a long time, has caused many people to become unemployed.

The fact that Artificial Intelligence Journalists have started and will begin to enter the media sector in some countries will also bring about the fear of being unemployed among journalists. This is an inevitable fact. However, we should look for ways to learn how to work with Artificial Intelligence Journalists instead of having this fear and experiencing uneasy periods in both our business and private lives. For this, too; It will be important for their future that those currently working in the media industry train themselves on how to employ and manage Artificial Intelligence Journalists through short and accelerated courses. The 'media members of the future', who are still studying in the departments of communication faculties of universities, in addition to their normal courses; They are also required to take coding courses, which will determine how they will manage their AI Journalists and make their job easier. Today, a medical doctor; Just as they use robots when performing heart, brain or eye surgery, media professionals should know how to use them in their own fields. In conclusion, we can say this: It is certain that Artificial Intelligence Journalists (robots) will enter the media sector in the coming periods. However; We should not worry that we will lose our job.

As Prof. Dr. Sırrı Akbaba stated above; “The source of robots' behavior is also human. No matter how much the Artificial Intelligence Journalist develops, human journalism does not die. That is, if there is no 'thought', there is no 'human'. The essence of man is thought.”

The essence of the word is this: The people who make the robots are also human. Robots; they will be as successful as the data uploaded to them. It would be beneficial for present and future media members to educate themselves as individuals who use robots, not who make robots.

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